

Növenyvirusok, Vektorok, Virusátvitel. (Plant Viruses, Vectors, and Virus Transmission.) 1972. Jozsef Horvath (Hungarian Academy of Sciences). Akademiai Kiado, Budapest. 515 pp. In Hungarian (price: 92 florins).

This book, written by a crop-protection expert, is an up-to-date presentation of the relationships between plant pathogenic viruses and vectors. In addition to insect vectors, to which more than 100 pages are devoted, other transmitters, such as nematodes and fungi, are described in great detail. There are very good descriptions of interactions between aphids and viruses, as well as of relationships between viruses and leafhoppers, plant hoppers, mites, thrips, whiteflies, scale insects, mealy bugs, psyllids, woodlice, grasshoppers, earwigs, beetles, and others. Other chapters deal with methods of field and laboratory experimentation, serology, purification, chemical properties of viruses, and control of virus diseases including vector control. Each chapter is followed by a list of "Recommended literature," comprising the most important publications of the world literature. An English table of contents is provided, as well as an author and subject index for the whole volume. The book is very well illustrated.

Some of the recent findings concerning the mycoplasmalike agents of plant diseases, transmitted by leafhoppers and psyllids, are also discussed in this treatise.

KARL MARAMOROSCH

Australian Butterflies. Charles McCubbin. 1971. Thomas Nelson, Ltd. Dai Nippon Printing Co., Hong Kong. 206 pp. (Distributed by Entomol. Repr. Specialists, Los Angeles, Calif.) \$30.

This is a large volume weighing about five pounds. It is, therefore, a bit heavy to pick up, but once you start reading it, you will find it much more difficult to put down.

Charles McCubbin has produced a vital, fascinating book which makes a momentous contribution to neophytes as well as scientists. Mr. McCubbin's magnificent water color paintings of the insects and their food plants are superbly reproduced; there are also representations of larvae, pupae, and most interesting likenesses of localities where described specimens have been observed or taken.

His descriptions of Distribution, Life-History and Flying Period, with frequent notes of interest and importance, complete a superb document that must be seen to be believed. No one interested in entomological natural history should be without it.

BERNARD HEINEMAN

Noctuidae of North America. A. R. Grote. 1971. E. W. Classey, Ltd., Hampton, Middlesex, England. 85 pp. (Distributed by Entomol. Repr. Specialists, Los Angeles, Calif.) \$16.95.

Written in 1882 by A. R. Grote, this is a profound book. It is fortunate that E. W. Classey of Hampton, England, reprinted it with an excellent bio-biographical foreword by R. S. Wilkinson.

Grote's earliest deep study of the Noctuidae took place over 100 years ago; in fact, his first papers on Lepidoptera were published in 1862.

The book contains much of importance and the illustrations excite one's interest, but there is no description of insect life history and food plants, which tends to detract. The last paragraph, however, tells the story of "A Colony of Butterflies" which needs to be read by everyone interested in conservation.

BERNARD HEINEMAN